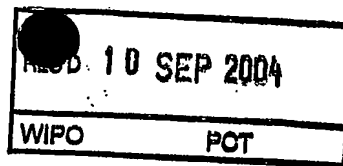


PCT

国際予備審査報告

(法第12条、法施行規則第56条)
[PCT36条及びPCT規則70]

出願人又は代理人 の書類記号 JJVC-90-PCT	今後の手続きについては、国際予備審査報告の送付通知（様式PCT/ IPEA/416）を参照すること。	
国際出願番号 PCT/JPO3/08108	国際出願日 (日.月.年) 26.06.2003	優先日 (日.月.年) 28.06.2002
国際特許分類 (IPC) Int. Cl ⁷ G11B 7/135		
出願人 (氏名又は名称) 日本ビクター株式会社		

1. 国際予備審査機関が作成したこの国際予備審査報告を法施行規則第57条 (PCT36条) の規定に従い送付する。
2. この国際予備審査報告は、この表紙を含めて全部で 4 ページからなる。
- ☒ この国際予備審査報告には、附属書類、つまり補正されて、この報告の基礎とされた及び/又はこの国際予備審査機関に対してした訂正を含む明細書、請求の範囲及び/又は図面も添付されている。
(PCT規則70.16及びPCT実施細則第607号参照)
この附属書類は、全部で 5 ページである。
3. この国際予備審査報告は、次の内容を含む。
- I ☒ 国際予備審査報告の基礎
 - II ☐ 優先権
 - III ☐ 新規性、進歩性又は産業上の利用可能性についての国際予備審査報告の不作成
 - IV ☒ 発明の単一性の欠如
 - V ☒ PCT35条(2)に規定する新規性、進歩性又は産業上の利用可能性についての見解、それを裏付けるための文献及び説明
 - VI ☐ ある種の引用文献
 - VII ☐ 国際出願の不備
 - VIII ☐ 国際出願に対する意見

国際予備審査の請求書を受理した日 03.12.2003	国際予備審査報告を作成した日 13.08.2004	
名称及びあて先 日本国特許庁 (IPEA/JP) 郵便番号100-8915 東京都千代田区霞が関三丁目4番3号	特許庁審査官 (権限のある職員) 五賀 昭一	5D 9368
電話番号 03-3581-1101 内線 3550		

様式PCT/IPEA/409 (表紙) (1998年7月)

BEST AVAILABLE COPY

I. 国際予備審査報告の基礎

1. この国際予備審査報告は下記の出願書類に基づいて作成された。(法第6条(PCT14条)の規定に基づく命令に
 応答するために提出された差し替え用紙は、この報告書において「出願時」とし、本報告書には添付しない。
 PCT規則70.16, 70.17)

☐ 出願時の国際出願書類

- ☒ 明細書 第 1-29, 31-53 ページ、出願時に提出されたもの
 明細書 第 _____ ページ、国際予備審査の請求書と共に提出されたもの
 明細書 第 30 ページ、23.07.2004 付の書簡と共に提出されたもの

- ☒ 請求の範囲 第 15-24, 26-27 項、出願時に提出されたもの
 請求の範囲 第 _____ 項、PCT19条の規定に基づき補正されたもの
 請求の範囲 第 _____ 項、国際予備審査の請求書と共に提出されたもの
 請求の範囲 第 25, 29, 31 項、23.07.2004 付の書簡と共に提出されたもの

- ☒ 図面 第 1/31-31/31 ページ/図、出願時に提出されたもの
 図面 第 _____ ページ/図、国際予備審査の請求書と共に提出されたもの
 図面 第 _____ ページ/図、 _____ 付の書簡と共に提出されたもの

- ☐ 明細書の配列表の部分 第 _____ ページ、出願時に提出されたもの
 明細書の配列表の部分 第 _____ ページ、国際予備審査の請求書と共に提出されたもの
 明細書の配列表の部分 第 _____ ページ、 _____ 付の書簡と共に提出されたもの

2. 上記の出願書類の言語は、下記に示す場合を除くほか、この国際出願の言語である。

上記の書類は、下記の言語である _____ 語である。

- ☐ 国際調査のために提出されたPCT規則23.1(b)にいう翻訳文の言語
☐ PCT規則48.3(b)にいう国際公開の言語
☐ 国際予備審査のために提出されたPCT規則55.2または55.3にいう翻訳文の言語

3. この国際出願は、ヌクレオチド又はアミノ酸配列を含んでおり、次の配列表に基づき国際予備審査報告を行った。

- ☐ この国際出願に含まれる書面による配列表
☐ この国際出願と共に提出された磁気ディスクによる配列表
☐ 出願後に、この国際予備審査(または調査)機関に提出された書面による配列表
☐ 出願後に、この国際予備審査(または調査)機関に提出された磁気ディスクによる配列表
☐ 出願後に提出した書面による配列表が出願時における国際出願の開示の範囲を超える事項を含まない旨の陳述書の提出があった
☐ 書面による配列表に記載した配列と磁気ディスクによる配列表に記載した配列が同一である旨の陳述書の提出があった。

4. 補正により、下記の書類が削除された。

- ☐ 明細書 第 _____ ページ
☒ 請求の範囲 第 1-14, 28, 30 項
☐ 図面 図面の第 _____ ページ/図

5. ☐ この国際予備審査報告は、補充欄に示したように、補正が出願時における開示の範囲を超えてされたものと認められるので、その補正がされなかったものとして作成した。(PCT規則70.2(c) この補正を含む差し替え用紙は上記1.における判断の際に考慮しなければならず、本報告に添付する。)

IV. 発明の単一性の欠如

1. 請求の範囲の減縮又は追加手数料の納付の求めに対して、出願人は、

- ☐ 請求の範囲を減縮した。
- ☒ 追加手数料を納付した。
- ☐ 追加手数料の納付と共に異議を申立てた。
- ☐ 請求の範囲の減縮も、追加手数料の納付もしなかった。

2. ☐ 国際予備審査機関は、次の理由により発明の単一性の要件を満たしていないと判断したが、PCT規則68.1の規定に従い、請求の範囲の減縮及び追加手数料の納付を出願人に求めないこととした。

3. 国際予備審査機関は、PCT規則13.1、13.2及び13.3に規定する発明の単一性を次のように判断する。

- ☒ 満足する。
- ☐ 以下の理由により満足しない。

4. したがって、この国際予備審査報告書を作成するに際して、国際出願の次の部分を、国際予備審査の対象にした。

- ☒ すべての部分
- ☐ 請求の範囲 _____ に関する部分

V. 新規性、進歩性又は産業上の利用可能性についての法第12条(PCT35条(2))に定める見解、それを裏付ける文献及び説明

1. 見解

新規性(N)

請求の範囲

15-27, 29, 31

請求の範囲

有
無

進歩性(IS)

請求の範囲

15-27, 29, 31

請求の範囲

有
無

産業上の利用可能性(IA)

請求の範囲

15-27, 29, 31

請求の範囲

有
無

2. 文献及び説明(PCT規則70.7)

請求の範囲15-27, 29, 31

文献1: JP 2002-117572 A (シャープ株式会社)
2002.04.19
全文, 図1-26

文献2: JP 2000-339745 A (ソニー株式会社)
2000.12.08
全文, 図1-16

文献3: JP 2001-76370 A (ソニー株式会社)
2001.03.23
全文, 図1-12

は、当該技術分野における一般的技術水準を示す文献であって、第1レーザ光源と、第1レーザ光源とは波長の異なる第2レーザ光源と受光手段とを一体的に備えた集積デバイスと、第1及び第2レーザ光源から出射された後情報記録媒体から戻るレーザ光を共に集積デバイスの受光手段に入射させるレーザ光光路分岐素子を有する光ピックアップが記載されているが、第1レーザ光に対して偏光選択性を有し、第2レーザ光に対して偏光非選択性を有する偏光ビームスプリッタをレーザ光光路分岐素子として用いる構成は、国際調査報告で列記した文献のいずれにも、記載も示唆もされていない。

(当該発光点の、前記傾斜面・PBS膜面等を含む光学系による像点)と第2レーザ光の発光点が一致、若しくは同軸光軸上に位置するように設定されているため、ホログラム素子133の分割線及び対物レンズ203、瞳に対する位置オフセットが事実上0となり、良好なトラッキング誤差信号及びフォーカス誤差信号を得ることができる。

(5) フロントモニタ104からの信号により光出力制御を容易に行うことができる。

なお前記実施形態において、第1レーザ光は650nm帯域の波長を有し、第2レーザ光は780nm帯域の波長を有するとした。しかし、前記第1レーザ光は400nm帯域あるいは780nm帯域の波長を有してもよい。また第2レーザ光は650nm帯域あるいは400nm帯域の波長帯の波長を有してもよい。

なお、この第1実施形態において、偏光ビームスプリッタ105は、プリズム105aと105bと偏光ビームスプリッタ膜面118とから成り、プリズムと称することもできる(以下の実施例に付いても同様である)。

図17はこの発明の光ピックアップの第2実施形態を示す概略図である。

同図において、図6乃至図12と同一又は類似の番号を付した部材は、第1実施形態における各部材と同一または類似の部材を示す。

この第2実施形態の光ピックアップ240は、概略、第1実施形態と同様の構成を有する。

すなわち図17に示すように、光ピックアップ240は、記録可能のパワーを有する第1レーザ光(波長650nm帯域)を出射する第1レーザ光源241と、偏光ビームスプリッタ(PBS)膜面118を含む偏光ビームスプリッタ244と、記録可能のパワーを有する第2レーザ光(波長780nm帯域)を出射する第2レーザ光源128(図11)及び前記第1、第2レーザ光を受光する受光手段を備える集積デバイス112と、を有する。また偏光ビームスプリッタ(PBS)膜面118は、図10に示す構成を有し、図9に示す波長特性を有する。

請 求 の 範 囲

1. (削除)
- 5 2. (削除)
3. (削除)

13. (削除)

14. (削除)

15. 第1波長を有し、且つ、記録可能なパワーを有する第1レーザ光を出射する第1レーザ光源と、

5 前記第1波長よりも長い第2波長を有し、且つ、記録可能なパワーを有する第2レーザ光を出射する第2レーザ光源及び前記第1、第2レーザ光を受光する受光手段をそれぞれ集積素子として基板の主面上に一体的に備えた集積デバイスと、

10 前記第1波長を有する前記第1レーザ光に対して偏光選択性を有し、前記第2波長を有する前記第2レーザ光に対して偏光非選択性を有し、且つ、前記第1レーザ光源から出射された前記第1レーザ光を入射させる第1面と、前記第1レーザ光を情報記録媒体側へ出射させると共に、前記情報記録媒体側からの前記第1レーザ光の復路光を入射させる第2面と、前記復路光を前記集積デバイス側に出射させる第3面とを備えた偏光ビーム
15 スプリッタであるレーザ光光路分岐素子とを有することを特徴とする光ピックアップ。

16. 請求の範囲第15項に記載された光ピックアップであって、

前記レーザ光光路分岐素子は、前記レーザ光光路分岐素子に対してP偏

ることを特徴とする光ピックアップ。

25. (補正後) 請求の範囲第15項乃至第24項のいずれかに記載された光ピックアップであって、

5 前記第1レーザ光源と前記レーザ光光路分岐素子の間に、当該第1レーザ光源からの第1レーザ光を平行化する第1コリメータレンズを有し、前記集積デバイスと前記レーザ光光路分岐素子の間に、当該第2レーザ光源からの第2レーザ光を平行化する第2コリメータレンズを有することを特徴とする光ピックアップ。

26. 請求の範囲第25項に記載された光ピックアップであって、

10 前記レーザ光光路分岐素子は、前記第1コリメータレンズによって平行化された第1レーザ光の平行光束の入射平面を円形に整形するために、前記平行光束の光軸に対して傾斜した傾斜面を有することを特徴とする光ピックアップ。

15 27. 請求の範囲第15項乃至第26項のいずれかに記載された光ピックアップであって、

前記第1レーザ光は650nm帯の波長を有し、前記第2レーザ光は780nm帯の波長を有することを特徴とする光ピックアップ。

28. (削除)

20 29. (補正後) 請求の範囲第15項乃至第27項のいずれかに記載の光ピックアップであって、前記第1レーザ光源から出射された第1レーザ光の強度分布の長軸方向が、前記第1乃至第3光路を含む面内にあることを特徴とする光ピックアップ。

30. (削除)

31. (補正後) 請求の範囲第15項乃至第27項又は第29項のいずれかに記載の光ピックアップであって、前記レーザ光光路分岐素子は、前記第2レーザ光についてP偏光の透過率がS偏光の透過率より大きいことを特徴とする光ピックアップ。

Translation

PATENT COOPERATION TREATY

PCT/JP2003/008108



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference JJVC-90-PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/JP2003/008108	International filing date (day/month/year) 26 June 2003 (26.06.2003)	Priority date (day/month/year) 28 June 2002 (28.06.2002)
International Patent Classification (IPC) or national classification and IPC G11B 7/135		
Applicant VICTOR COMPANY OF JAPAN, LIMITED		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet. <input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of <u>5</u> sheets.
3. This report contains indications relating to the following items: I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input checked="" type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 03 December 2003 (03.12.2003)	Date of completion of this report 13 August 2004 (13.08.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP2003/008108

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1-29,31-53, as originally filed
 pages _____, filed with the demand
 pages 30, filed with the letter of 23 July 2004 (23.07.2004)
- ☒ the claims:
 pages 15-24,26-27, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages 25,29,31, filed with the letter of 23 July 2004 (23.07.2004)
- ☒ the drawings:
 pages 1/31-31/31, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☒ the claims, Nos. 1-14,28,30
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP03/08108

IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees the applicant has:

- ☐ restricted the claims.
- ☒ paid additional fees.
- ☐ paid additional fees under protest.
- ☐ neither restricted nor paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☒ complied with.
- ☐ not complied with for the following reasons:

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☒ all parts.
- ☐ the parts relating to claims Nos. _____

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP03/08108

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	15-27, 29, 31	YES
	Claims		NO
Inventive step (IS)	Claims	15-27, 29, 31	YES
	Claims		NO
Industrial applicability (IA)	Claims	15-27, 29, 31	YES
	Claims		NO

2. Citations and explanations

Claims 15-27, 29 and 31

Document 1: JP, 2002-117572, A (Sharp Corp.), 19 April, 2002 (19.04.02), full text, Figs. 1-26

Document 2: JP, 2000-339745, A (Sony Corp.), 8 December, 2000 (08.12.00), full text, Figs. 1-16

Document 3: JP, 2001-76370, A (Sony Corp.), 23 March, 2001 (23.03.01), full text, Figs. 1-12

The above documents, which show the general technical standards in the relevant technical fields, describe an optical pickup having (1) a first laser beam source, (2) an integrated device having (a) a second laser beam source with a wavelength different from that of the first laser beam source and (b) a beam-receiving means both integrated therein, and (3) a laser beam path branching element to let both the beams that have been emitted by the first and second laser beam sources and then returned from an information recording medium together into the beam-receiving means of the integrated device; however, a constitution wherein a polarization beam splitter having polarization selectivity for beams of the first laser and polarization non-selectivity for those of the second laser is used as a laser beam path branching element, is neither described nor suggested in any of the documents cited in the ISR.

10/519027
DT01 Rec'd PCT/PTC 23 DEC 2004

Our Ref.: JJVC-90-PCT-US

English translation of Amendment under PCT Article 34

PCT/JP2003/008108

P. 30 (WO2004/003901)

(the image point of that light emitting point from the optical system including the inclined surface and PBS film surface) and the light emitting point of the secondary laser light are set so as to be matching or positioned on the same optical axis, a position offset to a divisional line of the hologram elements 133, the objective lens 203 and a pupil substantially vanish, enabling satisfactory tracking error signals and focus error signals to be obtained.

(5) Light output can be easily controlled by the signal from the front monitor 104.

In the description of the above embodiment the primary laser light has a wavelength of the 650 nm band and the secondary laser light has a wavelength of the 780 nm band, however it is also suitable for the primary laser light to have a wavelength of the 400 nm band or the 780 nm band, moreover the secondary laser light may have a wavelength of the 650 nm band or the 400 nm band.

In this first embodiment the polarized light beam splitter 105 comprises the prisms 105a and 105b and the PBS film surface 118, however here, and in respect of subsequently described embodiments, the polarized light beam splitter 105 can be referred to as a prism.

FIG. 17 shows a schematic illustration of a second embodiment of an optical pickup according to the present intention.

In FIGS. 6 to 12 those elements having like reference numerals indicate those elements that are similar or the same as the respective elements of the first embodiment.

The optical pickup 240 of this second embodiment is of substantially the same configuration as the optical pickup according to the first embodiment.

That is to say, as shown in FIG. 17, this optical pickup comprises a primary laser light source 241 for emitting a primary laser light (wavelength of the 650 nm band) having sufficient power for recording, a polarized light beam splitter 244 including a polarized light beam splitting (PBS) film surface 118, and an integrated device 112 further comprising a secondary light source 128 (FIG. 11) for emitting a secondary laser light (having a wavelength of the 780 nm band) and having sufficient power for recording as well as light receiving means for receiving light from the primary and the secondary

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laser lights. Further, the PBS film surface 118 has the configuration as shown in FIG 10 and the wavelength reflection/transmission properties as shown in FIG 9.

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15. An optical pickup comprising:

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a primary laser light source for emitting a primary laser light having a first wavelength and having sufficient power for recording;

an integrated device further comprising a secondary laser light source for emitting a secondary laser light having a second wavelength that is longer than the first wavelength and having sufficient power for recording as well as light receiving means for receiving light of the primary and secondary laser lights; and

laser light optical path separating elements that are a polarized light beam splitter further comprising a first surface into which the first laser light emitted from the primary laser light source is injected, that has polarization selectivity in respect of the primary laser light having the first wavelength and no polarization selectivity in respect of the secondary laser light having the second wavelength, a second surface from which the primary laser light is emitted to the information recording medium side and into which return path light of the primary laser light from the information recording medium side is injected and a third surface from which the return path light is emitted to the integrated device side.

16. The optical pickup according to claim 15 wherein the laser light optical path separating elements pass all primary laser light having P polarization in relation to thereto, while reflecting all primary laser light having S polarization and reflecting all of the secondary laser light regardless of the polarization thereof.

17. The optical pickup according to claim 15 wherein the laser light optical path separating elements pass all of the primary laser light having P polarization in relation thereto, while reflecting all of the primary laser light having S polarization and passing all of the secondary laser light regardless of the polarization thereof.

18. The optical pickup according to claim 15 wherein the laser light optical path separating elements have a fourth surface that passes, from among the primary laser light, P polarized light components in relation to this polarized light beam splitter, passes from 5 percent to 20 percent of S polarized light components while reflecting the remainder, reflects all of the secondary laser light regardless of the direction of polarization thereof

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and emits from 5 percent to 20 percent of the primary laser light to light quantity detecting elements in the forward direction thereto.

19. The optical pickup according to claim 15 wherein the laser light optical path separating elements of this optical pickup pass primary laser light emitted from the primary laser light source toward the information recording medium side and reflect return path light of the primary laser light from the information recording medium to the integrated device side, reflect the secondary laser light from the secondary laser light source to the information recording medium side and reflect the secondary laser light from the information recording medium to the integrated device side, and the light receiving elements receive light that is return path light of the primary laser light or the secondary laser light from the information recording medium, emitted from the laser light optical path separating elements.

20. The optical pickup according to claim 19 wherein the laser light optical path separating elements function, in relation to wavelengths of the primary laser light, to pass P polarized light and to reflect S polarized light, and function, in relation to wavelengths of the secondary laser light, as a total light reflecting prism reflecting both P polarized light and S polarized light.

21. The optical pickup according to claim 19 wherein the primary laser light source, the integrated device and the laser light optical path separating elements are disposed such that the optical axes connecting therebetween are positioned on the same plane, the primary laser light source is disposed such that the direction of polarization of the primary laser light is parallel to that plane and the secondary laser light source is disposed such that the direction of polarization of the secondary laser light is perpendicular to that plane.

22. The optical pickup according to either of claim 18 or claim 19 wherein a collimator lens that collimates the primary laser light and the secondary laser light traveling from the laser light optical path separating elements to the objective lens is

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disposed between the laser light optical path separating elements and objective lens.

23. The optical pickup according to claim 15 wherein the laser light optical path separating elements reflect the primary laser light emitted from the primary laser light source to the information recording medium side, pass return path light of the primary laser light from the information recording medium to the integrated device side, pass the secondary laser light from the secondary laser light source to the information recording medium side and pass return path light of the secondary laser light from the information recording medium to the integrated device side, and the light receiving means receives return path light of the primary laser light source and the secondary laser light source from the information recording medium, emitted from the laser light optical path separating elements.

24. The optical pickup according to claim 23 wherein the laser light optical path separating elements function, in relation to wavelengths of the primary laser light, to reflect S polarized light and to pass P polarized light, and function, in relation to wavelengths of the secondary laser light, as a light passing member that passes both P polarized light and S polarized light.

25. (Amended) The optical pickup according to any of claims 15 to 24 wherein a primary collimator lens for collimating the primary laser light from the primary laser light source is disposed between the primary laser light source and the laser light optical path separating elements and a secondary collimator lens for collimating the secondary laser light from the secondary laser light source is disposed between the integrated device and the laser light optical path separating elements.

26. The optical pickup according to claim 25 wherein the laser light optical path separating elements of this optical pickup have an inclined surface that, in order to make the plane of incidence of a parallel light beam of the primary laser light made parallel by the first collimator lens into a circular form, is inclined in relation to the optical axis of that parallel light beam.

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27. The optical pickup according to any of claims 15 to 26 wherein the primary laser light has a wavelength of the 650 nm band and that the secondary laser light has a wavelength of the 780 nm band.

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29. (Amended) The optical pickup according to any of claims 15 to 27 wherein the long axial direction of the intensity distribution of the primary laser light emitted from the primary laser light source is in the plane including the first to third optical paths.

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31. (Amended) The optical pickup according to any of claims 15 to 27, 29 wherein the laser light optical path separating elements operate in respect of the secondary laser light such that the ratio of P polarized light that is passed is greater than the ratio of S polarized light.

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